PATHWAY DESIGN, INC.

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Pathway Design, Inc.

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NEWS RELEASE

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Release Date: November 13, 1984

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PATHWAY DESIGN ANNOUNCES NETPATH LAN GATEWAY TO PROVIDE HOST COMMUNICATION FOR NETWORKED PCs

WELLESLEY, Mass., Nov. 13 -- Pathway Design, Inc. today announced netPATH, a series of SNA and BSC gateways that provides communications capabilities for multiple PCs on local area networks (LANs) with a variety of IBM hosts. The netPATH product is resident on a network gateway and permits 32 concurrent host communication sessions through value-added emulation of 3270, 3770 and 3780/2780 controllers and attached devices. The netPATH gateway will be available from Pathway Design in January 1985 for $1,995.

"The netPATH gateway is an extremely important announcement for LAN users," said Timothy Wise, Pathway Design Vice President. "A single netPATH gateway can support multiple users sharing a modem and common phone lines to access different host data in both remote job entry and interactive modes. Meanwhile, network users can take advantage of all the LAN's features. The product is an essential addition to our product line, which supports micro-mainframe communication in both MS-DOS and UNIX environments."

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Pathway Design's netPATH operates with a number of LANs including Corvus Systems' Omninet, 3 Com's Etherlink, Orchid Technology's PCnet, Davong's MultiLink and Televideo's Personal Mini, using Novell's NetWare/S. The netPATH product permits a variety of IBM-compatible PCs located on these networks to communicate with IBM hosts over dial-up, leased, point-to-point or multi-dropped lines.

The netPATH product allows access to a variety of IBM hosts (370, 30XX, 43XX, 8100 and Series 1) and host applications including CICS, CMS, DSTPRINT, ISPF, JES2 and TSO/SPF. In addition, multiple hosts can be accessed by adding gateways to the LAN and configuring the Logical Unit to the gateway required.

With netPATH, users can download host files to the individual personal computer or a LAN server for use by all personal computers on the network. The host connection can be maintained as data is processed locally and directed to the disk(ette) for filing or returned to the host. A simple keystroke allows the user to go back and forth between a personal computer application and host communication sessions.

"The beauty of netPATH is its transparency to the user," said Robert Broggi, Pathway Design President. "The netPATH gateway not only resides in the background until needed, but the product also manages all data conversion between the host and networked personal computers. In addition, we offer extremely friendly menu-based tools for simple installation and product operation."

Pathway Design's netPATH gateway requires an IBM-compatible personal computer running PC-DOS or MS-DOS with one diskette drive, 128 Kbytes of memory and Pathway Design's Communications Adapter. All Pathway Design products feature the ability to access a local application without losing a host session, multiple concurrent session support, host-initiated printing, data redirection to disk(ette) and Programmatic Interfaces to micro-based application software.

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The Pathway Design/Communications Adapter is a multi-function, dual-channel circuit card that provides access to a variety of networks without removing the board. The Adapter card, operating with the Pathway Design software, plugs into an available expansion slot, enabling personal computers to attach to SNA/SDLC and BSC networking environments. The Pathway Design/Adapter Cable, a 10-foot shielded cable, allows the Communications Adapter to connect to a synchronous modem or modem eliminator.

Pathway Design, Inc. develops and markets an integrated family of data communications software and hardware products that provides links between professional microcomputers and IBM communications networks. The products are designed for medium- to large-sized companies in industries such as insurance, health care, manufacturing and distribution, and financial services.

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Product Fact Sheet

PATHWAY DESIGN EXPANDS MICRO-MAINFRAME CAPABILITIES IN SNA AND BSC NETWORKING ENVIRONMENTS

As the need increases for rapid access to corporate information, executive personal computer users are demanding sophisticated communications capabilities for interacting, storing and retrieving information from mainframes. MIS directors want to offer an expanded range of services to executive users, while maintaining the integrity of the mainframe's data.

Pathway Design's pcPATH, uniPATH and netPATH product lines address a number of micro-mainframe communications requirements in the MS-DOS, UNIX and local area network (LAN) environments. All product families offer value-added emulation of commonly supported IBM 3270, 3770, 3780/2780 devices in SNA and BSC networking environments.

"Pathway Design is committed to enriching networking environments by using the intelligence and power of the microcomputer with the most complete and versatile implementations of SNA and BSC communications services available on micro and supermicrocomputer systems," said Robert Broggi, Pathway Design, Inc. President.

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The pcPATH products and Pathway Design/Communications Adapter allow a variety of IBM-compatible personal computers to communicate with IBM hosts in SNA and BSC networking environments. Pathway Design products are easily incorporated into an existing IBM corporate network.

The uniPATH gateway family permits UNIX-based supermicrocomputer systems to communicate with a variety of IBM mainframes in SNA and BSC networking environments. Pathway Design's uniPATH is resident on the supermicro's hard disk and supports multiple, concurrent communication sessions for numerous devices connected to the UNIX system.

Pathway Design's netPATH products are resident on a network gateway and with the Pathway Design/Communications Adapter permit 32 concurrent host communication sessions for all nodes on several popular LANs. The netPATH gateway operates with a number of LANs including Corvus Systems' Omninet, 3 Com's Etherlink, Orchid Technology's PCnet, Davong's Multilink and Televideo's Personal Mini using Novell's NetWare/S.

Products Provide Increased Versatility, Expanded Capability

The Pathway Design products include a number of features that place the company ahead of competitors. The products maintain a host connection while running a local application so that during host transmission sessions, users log-on once to execute a local application with a few simple keystrokes. The Pathway Design products also include a wide range of printer functions, supporting host-initiated printing, local print activities or a multi-printer configuration that performs host-initiated and local printing concurrently and independently.

Pathway Design's Programmatic Interfaces and Data Redirection allow users to execute DOS facilities and PC applications during micro-host communications as well as direct data to the disk(ette) in a 3270 interactive mode.

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For incorporating host information into PC applications such as Lotus 1-2-3 or VisiCalc, the enhanced Pathway Design products allow users to exit from, yet still maintain, a host communications session, access a DOS screen and execute a custom application that appears to DOS as a utility. The custom application, in turn, reformats and inputs host data into the PC application.

"The Pathway Design software presents the user with a consistent operating environment for organizations supporting multiple network protocols," Broggi said. "In addition, Pathway Design's software portability enables our products to operate on a wide variety of personal computers, ensuring a consistency of operations across multiple product lines."

The Pathway Design/Communications Adapter is a multi-function, dual-channel circuit card that provides access to a wide variety of networks without removing the board. The Adapter card, operating in conjunction with the Pathway Design software, plugs into a personal computer expansion slot, allowing personal computers to attach to networks using SDLC or BSC protocols over leased and switched lines. The Pathway Design/Adapter Cable, a 10-foot shielded cable, allows the Communications Adapter to connect to a modem or modem eliminator.

Pathway Design, Inc. develops and markets an integrated family of data communications software and hardware products that provide links between professional personal computers and communications networks. The products are designed for medium- to large-sized companies in industries such as insurance, health care, manufacturing, distribution and financial services.

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PATHWAY DESIGN SIGNS THREE-YEAR CONTRACT WITH NOVELL;
NETPATH SERVES AS HOST GATEWAY SUPPORTING NUMEROUS LANs

WELLESLEY, Mass., Nov. 13 -- Pathway Design, Inc. today announced a one-half-million dollar contract with Novell, Inc. to provide netPATH, a series of host gateways, for Novell's family of local area network (LAN) products. The netPATH product, operating under Novell's NetWare operating system, is resident on a network server and permits 32 concurrent host communication sessions. Novell will offer netPATH by the first quarter of 1985.

"We are very pleased with our contract with Pathway Design," said Craig Burton, Vice President of Marketing at Novell. "Not only do we feel that the company is technologically advanced and financially sound, but they also bring us an invaluable part of the complete networking solution. Novell is dedicated to the complete sharing of information by eliminating hardware, software and communications barriers."

Pathway Design will provide Novell with SNA and BSC versions of the software, featuring value-added emulation of 3270, 3770 and 3780/2780 controllers as well as the Pathway Design/Communications Adapter. Under the terms of the three-year contract, Pathway Design will manufacture the netPATH software and Adapter, while Novell will reproduce the software, package the product and provide Pathway Design with a royalty payment for each product sold.

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Novell plans to distribute netPATH with its NetWare product offerings through domestic and international distributors. Novell is targeting marketing and sales efforts to Fortune 2000 companies that use a large number of personal computers and require information sharing and access to mainframe corporate data.

"Our contract with Novell is a crucial response to the growing demand for resource and information sharing in multi-user environments," said Robert Broggi, Pathway Design, Inc. President. "The ability for netPATH to operate with Novell's NetWare products allows the Pathway Design gateway to be compatible with 13 popular LANs. This is a significant factor if we wish to increase the market share we have achieved with our UNIX and MS-DOS-based communications products."

The netPATH product permits IBM-compatible PCs located on a variety of networks to communicate with IBM hosts over dial-up, leased, point-to-point or multi-dropped lines. With Novell's NetWare products, netPATH can be used on a number of LANs including Corvus Systems' Omninet, 3 Com's Etherlink, Orchid Technology's PCnet, and Davong's MultiLink.

The netPATH product allows access to a variety of IBM hosts (370, 30XX, 43XX, 8100 and Series 1) and host applications, including CICS, CMS, DSTPRINT, ISPF, JES2 and TSO/SPF. In addition, multiple hosts can be accessed by adding gateways to the LAN and configuring the logical units to the gateway required.

Pathway Design's netPATH gateway requires an IBM-compatible personal computer running PC-DOS or MS-DOS with one diskette drive, 128 Kbytes of memory and Pathway Design's Communications Adapter. All Pathway Design products feature the ability to access a local application without losing a host session, multiple concurrent session support, host-initiated printing, data redirection to disk(ette) and Programmatic Interfaces to micro-based application software.

(more)

The netPATH/Communications Adapter is a multi-function, dual-channel circuit card that operates with the netPATH software, providing access to IBM SNA or BSC networks using the same Communications Adapter. The netPATH/Adapter Cable, a 10-foot shielded cable, allows the Communications Adapter to connect to a modem or modem eliminator.

Pathway Design, Inc. develops and markets an integrated family of data communications software and hardware products that provides links between professional microcomputers and communications networks. The products are designed for medium- to large-sized companies in industries such as insurance, health care, manufacturing and distribution, and financial services.

Novell, Inc., Orem, Utah, is a two-year-old company that specializes in networking technology. Novell's NetWare products include the NetWare operating system and a number of LAN product offerings. The privately held company employs 100 people and reports a $16 million annualized rate of growth.

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Company Background

PATHWAY DESIGN ENHANCES COMMUNICATION FOR WIDE RANGE OF COMPUTERS AND NETWORKS

Pathway Design, Inc. designs and markets data communications products that enable a wide range of microcomputers to act as effective, intelligent nodes in diverse networking environments while communicating with a variety of mainframes. Executive personal computer users are predicted to spend more than $500 million on micro-mainframe communication products in 1984 alone, according to International Resource Development, Inc.

In response to the market's need for products that offer extensive communications capabilities, Pathway Design has developed the pcPATH, netPATH and uniPATH product families. These products permit IBM and compatible personal computers to communicate with a variety of IBM mainframes in MS-DOS, UNIX and local area network (LAN) environments. Each product family offers value-added emulation of commonly supported 3270, 3770, 3780 and 2780 devices.

Since its incorporation in February 1983, Pathway Design has reported more than 3,000 units sold and has signed contracts with the Sperry Corporation, Digital Communications Associates, Inc. (DCA), L. M. Ericsson, Nixdorf Computer Corp., Charles River Data Systems, Visual Technology Inc. and Novell, Inc.

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Pathway Design's software products offer a wide range of features including the ability to access a local application without losing a host session, multiple concurrent print support, host-initiated printing, and a lifetime software warranty.

Pathway Design will market the products to medium- to large-sized companies in industries such as insurance, health care, manufacturing, distribution, and financial services. Pathway Design's distribution channels will include direct sales to end users, microcomputer manufacturers, selected distributors, and large OEM agreements.

Pathway Design, Inc. is a privately held company. The company has received financing from Venture Capital Fund of New England, Computer Partners, Kaufman & Co, Massachusetts Capital Resource Company and G.S. Partners of Boston. The company expects revenues to reach $6.5 million by the end of fiscal 1985.

Personal Computers as Effective Nodes in Diverse Networks

The Pathway Design software is developed according to a "building block" structure that provides users with flexibility regarding the type of personal computer involved in the link, the communications protocol involved, and the type of terminal emulation desired.

"This building block principle is instrumental in ensuring a consistency of operation across product lines and microcomputers, which is particularly important in large, multi-division companies," said Robert Broggi, Pathway Design, Inc. President.

The Pathway Design/SNA and Pathway Design/BSC software is written in the machine independent, high-level language "C," and designed with a multi-tasking and modular architecture. The products are easily enhanced and ported to a variety of micro and supermicrocomputers and network architectures.

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"Pathway Design's SNA products support Physical Unit Type 2 with Logical Units 1, 2 and 3. This advanced implementation of IBM's architecture gives the products a variety of capabilities that place Pathway Design ahead of competitors," Broggi said. "We have utilized the intelligence and power of the microcomputer to construct the most complete and versatile implementations of SNA and BSC communications services available on personal computers."

With the multi-tasking design of the software, users can perform concurrent communications functions, maintain an SNA connection with the host while running a local application, initiate printing functions from the host for multiple PC printers, and expect a "graceful shutdown" and not lose data should an SNA connection become faulty.

The Pathway Design/RJE products support host data compression, full-formatted printing, and capabilities for translating ASCII or EBCDIC line transmission formats, allowing data transfer directly to and from a hard or floppy disk.

"The Pathway Design products, unlike competing products, give the user the flexibility to transfer data in formats acceptable to a variety of peripherals. Other products may alter the data stream, yet not reformat the data to be useful at its destination," Broggi said.

The Pathway Design/Communications Adapter is a multi-function, dual-channel circuit card that operates in conjunction with pcPATH and netPATH software. The Adapter card plugs into a personal computer expansion slot allowing personal computers to attach to networks using SDLC or BSC protocols over leased and switched lines. The Pathway Design/Adapter Cable, a 10-foot shielded cable, allows the Communications Adapter to connect to a modem or modem eliminator.

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Management Team Includes In-Depth Experience

The Pathway Design management team has a wide range of experience in software development, consulting and marketing of a broad array of software services to large Fortune 2000 companies.

Robert Broggi's experience includes 20 years in the data processing industry. During this time, Broggi was a Systems Manager and Product Support Manager at Keane Associates, Boston, a major supplier of professional software services.

Broggi also cofounded Paramin, Inc., a communications consulting firm. While at Paramin, Broggi became Chief Operating Officer, where he was responsible for marketing and sales, administration and finance, and technical management. Paramin's annual revenues totaled more than $3 million, with three offices in the U.S. and Europe and 65 employees.

Broggi is a graduate of the University of Massachusetts with a bachelor of arts degree.

Timothy Wise, Vice President, has been involved in the data processing industry for more than 13 years. Before joining Pathway Design, Wise was a Technical Director at Paramin, Inc. While at Paramin, he managed a technical staff of 20 and was responsible for the design, development and management of major communications projects including bisynchronous communications and SNA/SDLC emulation on non-IBM equipment.

At Pathway Design, Wise is responsible for the company's research and development activities.

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Edward Mangiaratti, Vice President, has had extensive experience in the software engineering field. Mangiaratti's experience includes a Senior Software Engineer position at Incoterm, Inc., during which time he managed the design and implementation of a multi-programming, multi-tasking operating system.

Mangiaratti was also a Senior Software Engineer and later Director of Research and Education at Paramin, Inc. In this capacity, he developed a software development methodology that included project monitoring and control systems for tracking progress, project estimation and management mechanisms, and education of all technical staff.

Mangiaratti is a graduate of the University of Massachusetts with a bachelor of science degree. He also holds a master of science degree from the University of Maryland.

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